



MILLINGTON, TN

September 2, 2020

Lucite

Subject: September vibration report

Most of the machines surveyed were found to be in good condition with the exception of the following:

QualiTTest® uses a four-step rating system for defects.

Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue to normally monitor.

Class II: Defect (s) present that may cause problem in long term (2-6 months.). Repair during normal maintenance scheduling. Continue to monitor.

Class III: Defect (s) present that may cause failure in short term (less than 2 months.). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

Class IV: Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

Hi-Speed Industrial Service tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

This completes our assessment of your equipment for this survey. Thank you for your business and don't hesitate to call if you have any comments or questions.

Sincerely,

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Hi-Speed Industrial Service
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Detailed Defects

SAR 03 Turbine Compressor Main Blower

The unit 1x RPM vibration has dropped slightly. Unit speed will most likely have some influence on vibration amplitude. Inspection of unit near the compressor end is still recommended. Our motion amplification camera system could help to identify if there are any structural issues. **Rated a Class II Defect.**

SAR 156 Spent Acid Feed Booster North

The data suggests the motor bearings are in severe distress. Discreet frequencies have been replaced with random noise. Replace the motor and inspect the pump and coupling during service. **Rated a Class III Defect.**

Observations

SAR 39C North East BFWP

Vibration data showed a large 1x RPM vibration in the fan end of the motor. Inspect for 1 or more of the following: bent shaft, poor coupling condition or installation, poor alignment, loose mounting bolts, cracked or defective base structure, or damaged fan.

SAR 10 Process Air Fan E

Still almost 3 g's RMS acceleration is still evident in the fan bearing data as noise. Higher speed fans like this one will usually generate more normally, so we will watch this unit closely. Make sure bearings are lubricated for service and environment; and inspect the installation and fasteners. **Rated a Class I Defect.**

MON132 Decanter Feed Pump Spare

A 1xRPM vibration at about 0.35"/sec velocity peak still appears to be in both the pump inboard bearing in the vertical. Inspect the unit for loose fasteners and structural issues. Check the coupling for wear and perform an alignment check and a shaft run out check. **Rated a Class I Defect.**

MON 36 Irganox Mix Feed Pump

The vibration data still looks to indicate a bearing race defect due to a first vibration at just over 3 orders of shaft speed has multiple harmonics. We will watch this unit closely for changes. **Rated a Class I Defect.**

MON 55SM Hut Pump S

The motor data shows a vibration at near 54 orders with 120 Hz side bands. This is usually related to poor rotor bar connection. No immediate actions required. **Rated a Class I Defect.**

SAR55A Neutralization Pump North

The data continues to indicate distress in the inboard motor bearing. Still recommend replacing the motor in the next few months or possibly sooner. **Rated a Class II Defect for now.**

MON56 Inhibited MON transfer pump E

The overall vibration continues to grow. The pump axial vibration is still 0.39"/sec velocity peak and consists mostly of noise around 2-20 orders of shaft speed. We suspect recirculation caused by either pump wear or not running near the optimal point on the curve. The inboard horizontal also has what looks to be cavitation between 40 and 60 orders. Inspect as time allows. **Rated A Class II Defect.**

SAR66A, SAR66B, and SAR 66C Vertical Cooling Tower Pumps

These pumps all have a 1xRPM vibration at near or above 0.4"/second velocity peak. The vibration should be lowered if possible. Trim balancing might help if the unit is out. Check all fasteners for tightness and the shafts if possible, for runout. **Rated A Class I Defect.**

SAR 78A Cooling Tower Fan 1

The vibration in the motor has dropped since April: however, its still almost 0.4"/sec velocity peak. Consider a trim balance as time allows. **Rated A Class I Defect.**

SAR57B Oleum Tower Circulation Pump B

Vibration data still suggests Weak rotor bar end connections and possible wear in the motor bearings. Inspect the unit for operation in the optimal part of the pump curve. **Rated a Class I Defect.**

SAR 14 Combustion Air Fan

Fan unit still appears to have an elevated noise floor in the higher frequencies. Ensure the bearings are properly lubricated. **Rated a Class I Defect.**

ACN 36 ACH Neutralization Tank Circulation Pump

The pump still has a 4x RPM vibration in it that we believe is vane pass. The vibration is almost back up to 0.4"/sec velocity peak. We suspect wear in the pump or a process or flow issue. Could also be a coupling issue. Investigate as time allows. **Rated a Class II Defect.**

ACN13A #2 Kettle transfer pump N

The motor bearings still appear to be in some distress. Be prepared to change the motor out in the future. **Rated a Class II Defect.**

ACN28B ACN Fan E

A 1xRPM still dominates the velocity spectrum for the motor inboard vertical at near 0.48"/sec velocity peak. Inspect the motor and structure. Inspect, clean, and trim balance the fan soon if possible. **Rated a Class II Defect.**

SAR 38 Drying Tower Pump out

Pump data is dominated by a 1xRPM vibration at 0.45"/sec velocity peak in the Input horizontal. Inspect the coupling and fasteners. Perform an alignment check. Could be wear in the pump also. **Rated a Class I Defect.**

ACN 08 ACH Blend Tank

The motor bearings are showing an elevated vibration at shaft speed. Inspect the coupling, fasteners, structures and alignment in the near future. **Rated a Class II Defect.**

ACN 07 ACH Product Feed Pump South

The motor inboard bearing has a vibration at just over 6 orders and multiple harmonics of that frequency in the analysis spectrums. These vibrations suggest bearing defects; however, the vibrations have not increased over time. We will keep a close eye on this for changes. **Rated a Class I Defect.**

SAR 222 Oleum Tower Drain Pump

The pump data suggests either strong cavitation or bearing natural frequency vibrations. Data shows drop in recent data. **Rated a Class I Defect for now.**

Reported prior but not running this survey

ACN 07B ACH Product Feed Pump

Pump cavitation seems to be what we are seeing here most likely. Check the process parameters to make sure the pump is running optimally. **Rated a Class I Defect.**

ACN14 ACH Off Grade Pump

Reported in June. Motor inboard axial shows 4.5 g's overall. Multiple vibration peaks look to be mostly non-synchronous. The motor bearings are in some distress. We will keep a close eye on this unit for changes. **Rated a Class II Defect.**

ACN13B #2 Kettle Transfer Pump South

The May inboard motor bearing is showing signs of distress. This motor looks to have a strong rotor bar vibration. We suggest replacing the motor this year. **Rated a Class II Defect.**

SAR39A Boiler Feed Water Pump NW

The April motor data shows 1x and 2x vibrations and slight rotor bar. We recommend inspecting the coupling and insert. Perform an alignment if possible. **Rated a Class I Defect.**

SAR50A Drying Tower Circulation Pump W

The outboard end of the motor is still vibrating at shaft speed.

Inspect the motor and pump for loose fasteners or coupling, and motor cooling fan for defects. Have the alignment checked also. **Rated a Class I Defect.**

Abbreviated Last Measurement Summary *****

Database: Lucite Memphis MMA.rbm
Area: MMA
Route No. 6: TJ ROUTE 1
Report Date: 03-Sep-20 10:38

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
SAR03 - Turb Comp Main Blower	(17-Aug-20) OVERALL LEVEL	
5 - Turbine CPL X	.240 Mils	
6 - Turbine CPL Y	.208 Mils	
7 - Turbine Gov X	.157 Mils	
8 - Turbine Gov Y	.081 Mils	
9 - Blwr IB X	.262 Mils	
10 - Blwr IB Y	.446 Mils	
11 - Blwr OB X	.873 Mils	
12 - Blwr OB Y	1.122 Mils	
15 - Blwr HSG IB	.029 Mils	
16 - Blwer HSG OB	.034 Mils	
ACN17DP - DP Comp	(17-Aug-20) OVERALL LEVEL	
21 - ACH Motor CPL	.033 Mils	
22 - ACH GB CPL	.128 Mils	
27 - ACH CMP MTR	.014 Mils	
23 - ACH CMP CPL	.063 Mils	
24 - ACH CMP OB	.035 Mils	
ACN28ADP - Cooling Twr Fan W	(17-Aug-20) OVERALL LEVEL	
28 - CT Fan 1 W	.246 Mils	
ACN28BDP - Cooling Twr Fan E	(17-Aug-20) OVERALL LEVEL	
26 - CT Fan 2 E	.289 Mils	
SAR55A - Neutralization Pump N	(18-Aug-20) OVERALL LEVEL	
MOH - Motor Outboard Horizontal	.063 In/Sec	1K-20kHz .676 G-s

MOP - Motor Outboard Horz Peakvue	.226 G-s	
MOV - Motor Outboard Vertical	.110 In/Sec	.120 G-s
MOA - Motor Outboard Axial	.103 In/Sec	.124 G-s
MIH - Motor Inboard Horizontal	.101 In/Sec	3.037 G-s
MIP - Motor Inboard Horz Peakvue	2.844 G-s	
MIV - Motor Inboard Vertical	.142 In/Sec	.608 G-s
MIA - Motor Inboard Axial	.088 In/Sec	.504 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.098 In/Sec	.272 G-s
PIV - Pump Inboard Vertical	.030 G-s	
PIA - Pump Inboard Axial	.060 In/Sec	.165 G-s
	.042 In/Sec	.170 G-s
SAR59C - Scrub Twr Circ Pmp E	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.019 In/Sec	.199 G-s
MOV - Motor Outboard Vertical	.063 G-s	
MOA - Motor Outboard Axial	.037 In/Sec	.059 G-s
MIH - Motor Inboard Horizontal	.041 In/Sec	.036 G-s
MIP - Motor Inboard Horz Peakvue	.026 In/Sec	.568 G-s
MIV - Motor Inboard Vertical	.284 G-s	
MIA - Motor Inboard Axial	.027 In/Sec	.081 G-s
	.028 In/Sec	.098 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.083 In/Sec	.539 G-s
PIV - Pump Inboard Vertical	.345 G-s	
PIA - Pump Inboard Axial	.053 In/Sec	.360 G-s
POH - Pump Outboard Horizontal	.063 In/Sec	.196 G-s
POP - Pump Outboard Horz Peakvue	.056 In/Sec	.599 G-s
POV - Pump Outboard Vertical	.354 G-s	
POA - Pump Outboard Axial	.060 In/Sec	.165 G-s
	.055 In/Sec	.128 G-s
SAR59B - Scrub Twr Circ Pmp M	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.030 In/Sec	.446 G-s
MOV - Motor Outboard Vertical	.262 G-s	
MOA - Motor Outboard Axial	.040 In/Sec	.208 G-s
MIH - Motor Inboard Horizontal	.038 In/Sec	.126 G-s
MIP - Motor Inboard Horz Peakvue	.035 In/Sec	.678 G-s
MIV - Motor Inboard Vertical	.420 G-s	
MIA - Motor Inboard Axial	.037 In/Sec	.380 G-s
	.036 In/Sec	.382 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.151 In/Sec	1.070 G-s
PIV - Pump Inboard Vertical	.709 G-s	
PIA - Pump Inboard Axial	.070 In/Sec	.610 G-s
POH - Pump Outboard Horizontal	.079 In/Sec	.615 G-s
POP - Pump Outboard Horz Peakvue	.085 In/Sec	.930 G-s
POV - Pump Outboard Vertical	.558 G-s	
POA - Pump Outboard Axial	.106 In/Sec	.321 G-s
	.100 In/Sec	.300 G-s
SAR59A - Scrub Twr Circ Pmp W	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.032 In/Sec	.308 G-s
	.183 G-s	

MOV - Motor Outboard Vertical	.038 In/Sec	.106 G-s
MOA - Motor Outboard Axial	.025 In/Sec	.254 G-s
MIH - Motor Inboard Horizontal	.024 In/Sec	.359 G-s
MIP - Motor Inboard Horz Peakvue	.178 G-s	
MIV - Motor Inboard Vertical	.033 In/Sec	.190 G-s
MIA - Motor Inboard Axial	.027 In/Sec	.103 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.109 In/Sec	.344 G-s
PIP - Pump Inboard Horz Peakvue	.224 G-s	
PIV - Pump Inboard Vertical	.066 In/Sec	.301 G-s
PIA - Pump Inboard Axial	.096 In/Sec	.169 G-s
POH - Pump Outboard Horizontal	.067 In/Sec	.381 G-s
POP - Pump Outboard Horz Peakvue	.167 G-s	
POV - Pump Outboard Vertical	.076 In/Sec	.171 G-s
POA - Pump Outboard Axial	.098 In/Sec	.090 G-s
SAR39D - Boiler Feed H2O Pmp SE	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.062 In/Sec	.327 G-s
MOV - Motor Outboard Vertical	.022 G-s	
MOA - Motor Outboard Axial	.043 In/Sec	.118 G-s
MIH - Motor Inboard Horizontal	.093 In/Sec	.068 G-s
MIP - Motor Inboard Horz Peakvue	.049 In/Sec	.590 G-s
MIV - Motor Inboard Vertical	.100 G-s	
MIA - Motor Inboard Axial	.051 In/Sec	.185 G-s
PIH - Pump Inboard Horizontal	.094 In/Sec	.168 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
PIV - Pump Inboard Vertical	.132 In/Sec	1.179 G-s
PIA - Pump Inboard Axial	.190 G-s	
POH - Pump Outboard Horizontal	.132 In/Sec	.578 G-s
POP - Pump Outboard Horz Peakvue	.092 In/Sec	.658 G-s
POV - Pump Outboard Vertical	.063 In/Sec	.562 G-s
POA - Pump Outboard Axial	.065 G-s	
	.069 In/Sec	.255 G-s
	.073 In/Sec	.261 G-s
SAR39B - Boiler Feed H2O Pmp SW	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.033 In/Sec	.424 G-s
MOV - Motor Outboard Vertical	.047 G-s	
MOA - Motor Outboard Axial	.060 In/Sec	.257 G-s
MIH - Motor Inboard Horizontal	.031 In/Sec	.197 G-s
MIP - Motor Inboard Horz Peakvue	.053 In/Sec	.701 G-s
MIV - Motor Inboard Vertical	.085 G-s	
MIA - Motor Inboard Axial	.053 In/Sec	.443 G-s
PIH - Pump Inboard Horizontal	.055 In/Sec	.543 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
PIV - Pump Inboard Vertical	.049 In/Sec	.286 G-s
PIA - Pump Inboard Axial	.073 G-s	
POH - Pump Outboard Horizontal	.068 In/Sec	.247 G-s
POP - Pump Outboard Horz Peakvue	.059 In/Sec	.176 G-s
POV - Pump Outboard Vertical	.032 In/Sec	.402 G-s
POA - Pump Outboard Axial	.058 G-s	
	.053 In/Sec	.220 G-s
	.062 In/Sec	.161 G-s
SAR54C - Weak Acid Xfer Pump S	(18-Aug-20)	

		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.119 In/Sec	.437 G-s	
MOP - Motor Outboard Horz Peakvue	.274 G-s		
MOV - Motor Outboard Vertical	.091 In/Sec	.049 G-s	
MOA - Motor Outboard Axial	.040 In/Sec	.059 G-s	
MIH - Motor Inboard Horizontal	.096 In/Sec	.979 G-s	
MIP - Motor Inboard Horz Peakvue	.570 G-s		
MIV - Motor Inboard Vertical	.066 In/Sec	.101 G-s	
MIA - Motor Inboard Axial	.038 In/Sec	.143 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz	
PIP - Pump Inboard Horz Peakvue	.098 In/Sec	.183 G-s	
PIV - Pump Inboard Vertical	.0044 G-s		
PIA - Pump Inboard Axial	.047 In/Sec	.080 G-s	
	.065 In/Sec	.138 G-s	
SAR54B - Weak Acid Xfer Pump N	(18-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.049 In/Sec	.239 G-s	
MOV - Motor Outboard Vertical	.074 G-s		
MOA - Motor Outboard Axial	.051 In/Sec	.145 G-s	
MIH - Motor Inboard Horizontal	.057 In/Sec	.103 G-s	
MIP - Motor Inboard Horz Peakvue	.081 In/Sec	.358 G-s	
MIV - Motor Inboard Vertical	.061 G-s		
MIA - Motor Inboard Axial	.083 In/Sec	.063 G-s	
	.089 In/Sec	.072 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz	
PIP - Pump Inboard Horz Peakvue	.102 In/Sec	.849 G-s	
PIV - Pump Inboard Vertical	.165 G-s		
PIA - Pump Inboard Axial	.077 In/Sec	.431 G-s	
	.095 In/Sec	.565 G-s	
SAR50B - Drying Tower Circ Pump E	(18-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.096 In/Sec	.997 G-s	
MOV - Motor Outboard Vertical	.454 G-s		
MOA - Motor Outboard Axial	.126 In/Sec	.341 G-s	
MIH - Motor Inboard Horizontal	.109 In/Sec	.203 G-s	
MIP - Motor Inboard Horz Peakvue	.065 In/Sec	.544 G-s	
MIV - Motor Inboard Vertical	.213 G-s		
MIA - Motor Inboard Axial	.122 In/Sec	.149 G-s	
	.108 In/Sec	.138 G-s	
SAR38 - Drying Tower Pumpout	(21-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.132 In/Sec	1.096 G-s	
MOV - Motor Outboard Vertical	.540 G-s		
MOA - Motor Outboard Axial	.088 In/Sec	.304 G-s	
MIH - Motor Inboard Horizontal	.121 In/Sec	.239 G-s	
MIP - Motor Inboard Horz Peakvue	.156 In/Sec	.171 G-s	
MIV - Motor Inboard Vertical	.062 G-s		
MIA - Motor Inboard Axial	.134 In/Sec	.042 G-s	
	.159 In/Sec	.039 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz	
PIP - Pump Inboard Horz Peakvue	.455 In/Sec	.190 G-s	
PIV - Pump Inboard Vertical	.024 G-s		
PIA - Pump Inboard Axial	.238 In/Sec	.084 G-s	
	.309 In/Sec	.137 G-s	

SAR66E	- Vertical Cool Twr Pump #5	(18-Aug-20)	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal E-W		.126 In/Sec	.222 G-s	
MOP - Motor Outboard Horz Peakvue		.096 G-s		
MOV - Motor Outboard Vertical N-S		.193 In/Sec	.317 G-s	
MOA - Motor Outboard Axial		.290 In/Sec	.521 G-s	
MIH - Motor Inboard Horizontal E-W		.049 In/Sec	.522 G-s	
MIP - Motor Inboard Horz Peakvue		.221 G-s		
MIV - Motor Inboard Vertical N-S		.115 In/Sec	.354 G-s	
MIA - Motor Inboard Axial		.214 In/Sec	.266 G-s	
SAR66D	- Vertical Cool Twr Pump #4	(18-Aug-20)	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.068 In/Sec	.078 G-s	
MOP - Motor Outboard Horz Peakvue		.044 G-s		
MOV - Motor Outboard Vertical		.110 In/Sec	.049 G-s	
MOA - Motor Outboard Axial		.052 In/Sec	.058 G-s	
MIH - Motor Inboard Horizontal		.070 In/Sec	.084 G-s	
MIP - Motor Inboard Horz Peakvue		.043 G-s		
MIV - Motor Inboard Vertical		.122 In/Sec	.069 G-s	
MIA - Motor Inboard Axial		.077 In/Sec	.082 G-s	
SAR66C	- Vertical Cool Twr Pump #3	(18-Aug-20)	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.384 In/Sec	.085 G-s	
MOP - Motor Outboard Horz Peakvue		.048 G-s		
MOV - Motor Outboard Vertical		.123 In/Sec	.033 G-s	
MOA - Motor Outboard Vertical		.200 In/Sec	.029 G-s	
MIH - Motor Inboard Horizontal		.183 In/Sec	.066 G-s	
MIP - Motor Inboard Horz Peakvue		.035 G-s		
MIV - Motor Inboard Vertical		.131 In/Sec	.049 G-s	
MIA - Motor Inboard Axial		.093 In/Sec	.109 G-s	
SAR66B	- Vertical Cool Twr Pump #2	(18-Aug-20)	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.252 In/Sec	.148 G-s	
MOP - Motor Outboard Horz Peakvue		.071 G-s		
MOV - Motor Outboard Vertical		.172 In/Sec	.134 G-s	
MOA - Motor Outboard Axial		.482 In/Sec	.117 G-s	
MIH - Motor Inboard Horizontal		.132 In/Sec	.162 G-s	
MIP - Motor Inboard Horz Peakvue		.098 G-s		
MIV - Motor Inboard Vertical		.190 In/Sec	.085 G-s	
MIA - Motor Inboard Axial		.185 In/Sec	.111 G-s	
SAR66A	- Vertical Cool Twr Pump #1	(18-Aug-20)	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.473 In/Sec	.240 G-s	
MOP - Motor Outboard Horz Peakvue		.147 G-s		
MOV - Motor Outboard Vertical		.245 In/Sec	.127 G-s	
MOA - Motor Outboard Axial		.471 In/Sec	.189 G-s	
MIH - Motor Inboard Horizontal		.169 In/Sec	.123 G-s	
MIP - Motor Inboard Horz Peakvue		.076 G-s		
MIV - Motor Inboard Vertical		.253 In/Sec	.079 G-s	
MIA - Motor Inboard Axial		.186 In/Sec	.080 G-s	
SAR78A	- Cooling Tower Fan #1	(18-Aug-20)		

		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.209 In/Sec	.395 G-s	
MOP - Motor Outboard Horz Peakvue	.165 G-s		
MOV - Motor Outboard Vertical	.390 In/Sec	.175 G-s	
MOA - Motor Outboard Axial	.186 In/Sec	.162 G-s	
MIH - Motor Inboard Horizontal	.138 In/Sec	.551 G-s	
MIP - Motor Inboard Horz Peakvue	.382 G-s		
MIV - Motor Inboard Vertical	.120 In/Sec	.268 G-s	
MIA - Motor Inboard Axial	.138 In/Sec	.261 G-s	
SAR78B - Cooling Tower Fan #2	(18-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.078 In/Sec	.701 G-s	
MOV - Motor Outboard Vertical	.177 G-s		
MOA - Motor Outboard Axial	.079 In/Sec	.098 G-s	
MIH - Motor Inboard Horizontal	.164 In/Sec	.230 G-s	
MIP - Motor Inboard Horz Peakvue	.087 In/Sec	1.166 G-s	
MIV - Motor Inboard Vertical	.184 G-s		
MIA - Motor Inboard Axial	.104 In/Sec	.421 G-s	
	.186 In/Sec	.138 G-s	
SAR78C - Cooling Tower Fan #3	(18-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.074 In/Sec	1.216 G-s	
MOV - Motor Outboard Vertical	.507 G-s		
MOA - Motor Outboard Axial	.064 In/Sec	.127 G-s	
MIH - Motor Inboard Horizontal	.195 In/Sec	.110 G-s	
MIP - Motor Inboard Horz Peakvue	.068 In/Sec	1.350 G-s	
MIV - Motor Inboard Vertical	.651 G-s		
MIA - Motor Inboard Axial	.111 In/Sec	.539 G-s	
	.171 In/Sec	.513 G-s	
SAR78D - Cooling Tower Fan #4	(18-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.081 In/Sec	.550 G-s	
MOV - Motor Outboard Vertical	.270 G-s		
MOA - Motor Outboard Axial	.148 In/Sec	.340 G-s	
MIH - Motor Inboard Horizontal	.221 In/Sec	.263 G-s	
MIP - Motor Inboard Horz Peakvue	.118 In/Sec	.446 G-s	
MIV - Motor Inboard Vertical	.302 G-s		
MIA - Motor Inboard Axial	.189 In/Sec	.284 G-s	
	.200 In/Sec	.206 G-s	
SAR161C - N SAR Cool Twr Fan E	(20-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.110 In/Sec	.353 G-s	
MOV - Motor Outboard Vertical	.120 G-s		
MOA - Motor Outboard Axial	.129 In/Sec	.090 G-s	
MIH - Motor Inboard Horizontal	.222 In/Sec	.095 G-s	
MIP - Motor Inboard Horz Peakvue	.232 In/Sec	.331 G-s	
MIV - Motor Inboard Vertical	.114 G-s		
MIA - Motor Inboard Axial	.181 In/Sec	.182 G-s	
	.241 In/Sec	.113 G-s	
SAR161B - N SAR Cool Twr Fan Middle	(20-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
	.113 In/Sec	.950 G-s	

MOP - Motor Outboard Horz Peakvue	.279 G-s	
MOV - Motor Outboard Vertical	.155 In/Sec	.456 G-s
MOA - Motor Outboard Axial	.168 In/Sec	.492 G-s
MIH - Motor Inboard Horizontal	.099 In/Sec	.874 G-s
MIP - Motor Inboard Horz Peakvue	.281 G-s	
MIV - Motor Inboard Vertical	.123 In/Sec	.547 G-s
MIA - Motor Inboard Axial	.169 In/Sec	.548 G-s
SAR161A - N SAR Cool Twr Fan W	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.126 In/Sec	.889 G-s
MOV - Motor Outboard Vertical	.482 G-s	
MOA - Motor Outboard Axial	.159 In/Sec	.272 G-s
MIH - Motor Inboard Horizontal	.229 In/Sec	.210 G-s
MIP - Motor Inboard Horz Peakvue	.249 In/Sec	2.088 G-s
MIV - Motor Inboard Vertical	1.304 G-s	
MIA - Motor Inboard Axial	.070 In/Sec	.593 G-s
	.208 In/Sec	.278 G-s
SAR231A - Final Twr Circ Pump N	(18-Aug-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.068 In/Sec	.776 G-s
MOV - Motor Outboard Vertical N-S	.412 G-s	
MOA - Motor Outboard Axial	.058 In/Sec	.536 G-s
MIH - Motor Inboard Horizontal E-W	.107 In/Sec	.343 G-s
MIP - Motor Inboard Horz Peakvue	.050 In/Sec	.479 G-s
MIV - Motor Inboard Vertical N-S	.265 G-s	
MIA - Motor Inboard Axial	.049 In/Sec	.181 G-s
	.075 In/Sec	.166 G-s
SAR231B - Final Twr Circ Pump S	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.061 In/Sec	.594 G-s
MOV - Motor Outboard Vertical	.251 G-s	
MOA - Motor Outboard Axial	.037 In/Sec	.289 G-s
MIH - Motor Inboard Horizontal	.073 In/Sec	.183 G-s
MIP - Motor Inboard Horz Peakvue	.051 In/Sec	.417 G-s
MIV - Motor Inboard Vertical	.254 G-s	
MIA - Motor Inboard Axial	.037 In/Sec	.342 G-s
	.045 In/Sec	.197 G-s
SAR127 - Final Twr Pumpout Drain Pmp	(21-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.020 In/Sec	.392 G-s
MOV - Motor Outboard Vertical	.095 G-s	
MOA - Motor Outboard Axial	.022 In/Sec	.111 G-s
MIH - Motor Inboard Horizontal	.025 In/Sec	.191 G-s
MIP - Motor Inboard Horz Peakvue	.020 In/Sec	.340 G-s
MIV - Motor Inboard Vertical	.136 G-s	
MIA - Motor Inboard Axial	.031 In/Sec	.107 G-s
	.031 In/Sec	.129 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.061 In/Sec	.083 G-s
PIV - Pump Inboard Vertical	.035 G-s	
PIA - Pump Inboard Axial	.035 In/Sec	.132 G-s
	.075 In/Sec	.101 G-s

SAR 56A	- N Oleum Storage Tank Feed	(18-Aug-20)	
M1H - Motor Outboard Horizontal		OVERALL LEVEL	1K-20kHz
M1P - Motor Outboard Horz Peakvue	.058 In/Sec	.100 G-s	
M1V - Motor Outboard Vertical	.019 G-s		
M1A - Motor Outboard Axial	.095 In/Sec	.043 G-s	
M2H - Motor Inboard Horizontal	.054 In/Sec	.029 G-s	
M2P - Motor Inboard Horz Peakvue	.074 In/Sec	.308 G-s	
M2V - Motor Inboard Vertical	.097 G-s		
M2A - Motor Inboard Axial	.084 In/Sec	.077 G-s	
P1H - Pump Inboard Horizontal	.099 In/Sec	.048 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
P1V - Pump Inboard Vertical	.069 In/Sec	.113 G-s	
P1A - Pump Inboard Axial	.069 G-s		
P1H - Pump Inboard Horizontal	.041 In/Sec	.056 G-s	
P1P - Pump Inboard Horz Peakvue	.047 In/Sec	.038 G-s	
SAR 56B	- M Oleum Storage Tank Feed	(18-Aug-20)	
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.046 In/Sec	.266 G-s	
M1V - Motor Outboard Vertical	.050 G-s		
M1A - Motor Outboard Axial	.060 In/Sec	.107 G-s	
M2H - Motor Inboard Horizontal	.118 In/Sec	.056 G-s	
M2P - Motor Inboard Horz Peakvue	.162 In/Sec	.171 G-s	
M2V - Motor Inboard Vertical	.032 G-s		
M2A - Motor Inboard Axial	.134 In/Sec	.047 G-s	
P1H - Pump Inboard Horizontal	.069 In/Sec	.060 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
P1V - Pump Inboard Vertical	.233 In/Sec	.170 G-s	
P1A - Pump Inboard Axial	.097 G-s		
P1H - Pump Inboard Horizontal	.149 In/Sec	.053 G-s	
P1P - Pump Inboard Horz Peakvue	.065 In/Sec	.051 G-s	
SAR 56C	- S Oleum Storage Tank Feed	(18-Aug-20)	
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.059 In/Sec	.937 G-s	
M1V - Motor Outboard Vertical	.056 G-s		
M1A - Motor Outboard Axial	.033 In/Sec	.283 G-s	
M2H - Motor Inboard Horizontal	.044 In/Sec	.248 G-s	
M2P - Motor Inboard Horz Peakvue	.049 In/Sec	.253 G-s	
M2V - Motor Inboard Vertical	.180 G-s		
M2A - Motor Inboard Axial	.038 In/Sec	.231 G-s	
P1H - Pump Inboard Horizontal	.040 In/Sec	.190 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
P1V - Pump Inboard Vertical	.111 In/Sec	.213 G-s	
P1A - Pump Inboard Axial	.018 G-s		
P1H - Pump Inboard Horizontal	.046 In/Sec	.128 G-s	
P1P - Pump Inboard Horz Peakvue	.031 In/Sec	.081 G-s	
SAR128	- Oleum Fume Scrub Blwr	(18-Aug-20)	
MIH - Motor Inboard Horizontal	OVERALL LEVEL	1K-20kHz	
MIP - Motor Inboard Horz Peakvue	.072 In/Sec	.142 G-s	
MIV - Motor Inboard Vertical	.024 G-s		
MIA - Motor Inboard Axial	.037 In/Sec	.063 G-s	
FIH - Fan Inboard Horizontal	.064 In/Sec	.060 G-s	
FIP - Fan Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
	.090 In/Sec	.234 G-s	
	.061 G-s		

FIV - Fan Inboard Vertical	.031 In/Sec	.096 G-s
FIA - Fan Inboard Axial	.052 In/Sec	.098 G-s
FOH - Fan Outboard Horizontal	.116 In/Sec	.168 G-s
FOP - Fan Outboard Horz Peakvue	.029 G-s	
FOV - Fan Outboard Vertical	.088 In/Sec	.251 G-s
FOA - Fan Outboard Axial	.131 In/Sec	.176 G-s
SAR137B - Contain Pit Pumps	(18-Aug-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.050 In/Sec	.229 G-s
MOV - Motor Outboard Vertical N-S	.120 G-s	
MOA - Motor Outboard Axial	.065 In/Sec	.108 G-s
	.077 In/Sec	.110 G-s
SAR57A - Oleum Twr Circ Pump W	(20-Aug-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.055 In/Sec	.555 G-s
MOV - Motor Outboard Vertical N-S	.019 G-s	
MOA - Motor Outboard Axial	.094 In/Sec	.309 G-s
MIH - Motor Inboard Horizontal E-W	.050 In/Sec	.071 G-s
MIP - Motor Inboard Horz Peakvue	.081 In/Sec	1.409 G-s
MIV - Motor Inboard Vertical N-S	.335 G-s	
MIA - Motor Inboard Axial	.110 In/Sec	1.707 G-s
	.057 In/Sec	.739 G-s
SAR57B - Oleum Twr Circ Pump E	(18-Aug-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.104 In/Sec	2.571 G-s
MOV - Motor Outboard Vertical N-S	1.343 G-s	
MOA - Motor Outboard Axial	.105 In/Sec	.689 G-s
MIH - Motor Inboard Horizontal E-W	.116 In/Sec	.627 G-s
MIP - Motor Inboard Horz Peakvue	.120 In/Sec	3.721 G-s
MIV - Motor Inboard Vertical N-S	2.094 G-s	
MIA - Motor Inboard Axial	.106 In/Sec	1.071 G-s
	.108 In/Sec	.971 G-s
SAR37A - Interpass Twr Circ Pump N	(18-Aug-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.052 In/Sec	.563 G-s
MOV - Motor Outboard Vertical N-S	.335 G-s	
MOA - Motor Outboard Axial	.046 In/Sec	.120 G-s
MIH - Motor Inboard Horizontal E-W	.072 In/Sec	.158 G-s
MIP - Motor Inboard Horz Peakvue	.048 In/Sec	.645 G-s
MIV - Motor Inboard Vertical N-S	.310 G-s	
MIA - Motor Inboard Axial	.047 In/Sec	.166 G-s
	.050 In/Sec	.167 G-s
SAR14 - Combustion Air Fan W	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.085 In/Sec	.795 G-s
MOV - Motor Outboard Vertical	.382 G-s	
MOA - Motor Outboard Axial	.068 In/Sec	.370 G-s
MIH - Motor Inboard Horizontal	.054 In/Sec	.358 G-s
MIP - Motor Inboard Horz Peakvue	.081 In/Sec	1.700 G-s
MIV - Motor Inboard Vertical	.836 G-s	
MIA - Motor Inboard Axial	.062 In/Sec	.894 G-s
	.056 In/Sec	.737 G-s

		OVERALL LEVEL	1K-20KHz
FIH - Fan Inboard Horizontal	.092 In/Sec	1.056 G-s	
FIP - Fan Inboard Horz Peakvue	.140 G-s		
FIV - Fan Inboard Vertical	.044 In/Sec	.789 G-s	
FIA - Fan Inboard Axial	.101 In/Sec	.164 G-s	
FOH - Fan Outboard Horizontal	.103 In/Sec	2.085 G-s	
FOP - Fan Outboard Horz Peakvue	1.176 G-s		
FOV - Fan Outboard Vertical	.063 In/Sec	.836 G-s	
FOA - Fan Outboard Axial	.058 In/Sec	.424 G-s	
SAR11 - Recycle Fan W	(18-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.042 In/Sec	.178 G-s	
MOV - Motor Outboard Vertical	.090 G-s		
MOA - Motor Outboard Axial	.054 In/Sec	.066 G-s	
MIH - Motor Inboard Horizontal	.047 In/Sec	.057 G-s	
MIP - Motor Inboard Horz Peakvue	.028 In/Sec	.574 G-s	
MIV - Motor Inboard Vertical	.306 G-s		
MIA - Motor Inboard Axial	.050 In/Sec	.182 G-s	
FIH - Fan Inboard Horizontal	.043 In/Sec	.229 G-s	
FIP - Fan Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
FIV - Fan Inboard Vertical	.014 In/Sec	.014 G-s	
FIA - Fan Inboard Axial	.0065 G-s		
FOH - Fan Outboard Horizontal	.011 In/Sec	.0068 G-s	
FOP - Fan Outboard Horz Peakvue	.017 In/Sec	.0042 G-s	
FOV - Fan Outboard Vertical	.017 In/Sec	.022 G-s	
FOA - Fan Outboard Axial	.013 G-s		
	.012 In/Sec	.013 G-s	
	.036 In/Sec	.0055 G-s	
SAR15 - Process Air Fan W	(18-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.064 In/Sec	.415 G-s	
MOV - Motor Outboard Vertical	.158 G-s		
MOA - Motor Outboard Axial	.053 In/Sec	.397 G-s	
MIH - Motor Inboard Horizontal	.052 In/Sec	.342 G-s	
MIP - Motor Inboard Horz Peakvue	.056 In/Sec	.658 G-s	
MIV - Motor Inboard Vertical	.303 G-s		
MIA - Motor Inboard Axial	.046 In/Sec	.095 G-s	
FIH - Fan Inboard Horizontal	.051 In/Sec	.103 G-s	
FIP - Fan Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
FIV - Fan Inboard Vertical	.059 In/Sec	.596 G-s	
FIA - Fan Inboard Axial	.302 G-s		
FOH - Fan Outboard Horizontal	.035 In/Sec	.624 G-s	
FOP - Fan Outboard Horz Peakvue	.048 In/Sec	.501 G-s	
FOV - Fan Outboard Vertical	.070 In/Sec	1.064 G-s	
FOA - Fan Outboard Axial	.539 G-s		
	.057 In/Sec	.814 G-s	
	.044 In/Sec	.398 G-s	
SAR12 - Recycle Fan E	(18-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.114 In/Sec	.661 G-s	
MOV - Motor Outboard Vertical	.131 G-s		
MOA - Motor Outboard Axial	.128 In/Sec	.205 G-s	
MIH - Motor Inboard Horizontal	.214 In/Sec	.134 G-s	
	.115 In/Sec	1.539 G-s	

MIP - Motor Inboard Horz Peakvue	1.200 G-s	
MIV - Motor Inboard Vertical	.195 In/Sec	.662 G-s
MIA - Motor Inboard Axial	.179 In/Sec	.394 G-s
	OVERALL LEVEL	1K-20KHz
FIH - Fan Inboard Horizontal	.101 In/Sec	.171 G-s
FIP - Fan Inboard Horz Peakvue	.191 G-s	
FIV - Fan Inboard Vertical	.062 In/Sec	.179 G-s
FIA - Fan Inboard Axial	.088 In/Sec	.136 G-s
FOH - Fan Outboard Horizontal	.144 In/Sec	.523 G-s
FOP - Fan Outboard Horz Peakvue	.298 G-s	
FOV - Fan Outboard Vertical	.175 In/Sec	.287 G-s
FOA - Fan Outboard Axial	.169 In/Sec	.356 G-s
SAR10 - Process Air Fan E	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.167 In/Sec	.449 G-s
MOV - Motor Outboard Vertical	.246 G-s	
MOA - Motor Outboard Axial	.118 In/Sec	.210 G-s
MIH - Motor Inboard Horizontal	.068 In/Sec	.288 G-s
MIP - Motor Inboard Horz Peakvue	.169 In/Sec	1.042 G-s
MIV - Motor Inboard Vertical	.639 G-s	
MIA - Motor Inboard Axial	.089 In/Sec	.383 G-s
	.103 In/Sec	.372 G-s
FIH - Fan Inboard Horizontal	OVERALL LEVEL	1K-20KHz
FIP - Fan Inboard Horz Peakvue	.240 In/Sec	2.579 G-s
FIV - Fan Inboard Vertical	1.383 G-s	
FIA - Fan Inboard Axial	.143 In/Sec	1.817 G-s
FOH - Fan Outboard Horizontal	.137 In/Sec	.748 G-s
FOP - Fan Outboard Horz Peakvue	.283 In/Sec	1.808 G-s
FOV - Fan Outboard Vertical	1.096 G-s	
FOA - Fan Outboard Axial	.098 In/Sec	1.020 G-s
	.144 In/Sec	.517 G-s
SAR13 - Combustion Air Fan E	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.086 In/Sec	.610 G-s
MOV - Motor Outboard Vertical	.367 G-s	
MOA - Motor Outboard Axial	.076 In/Sec	.253 G-s
MIH - Motor Inboard Horizontal	.063 In/Sec	.193 G-s
MIP - Motor Inboard Horz Peakvue	.102 In/Sec	.472 G-s
MIV - Motor Inboard Vertical	.223 G-s	
MIA - Motor Inboard Axial	.050 In/Sec	.156 G-s
	.073 In/Sec	.303 G-s
FIH - Fan Inboard Horizontal	OVERALL LEVEL	1K-20KHz
FIP - Fan Inboard Horz Peakvue	.072 In/Sec	.403 G-s
FIV - Fan Inboard Vertical	.185 G-s	
FIA - Fan Inboard Axial	.089 In/Sec	.443 G-s
FOH - Fan Outboard Horizontal	.044 In/Sec	.276 G-s
FOP - Fan Outboard Horz Peakvue	.075 In/Sec	.414 G-s
FOV - Fan Outboard Vertical	.196 G-s	
FOA - Fan Outboard Axial	.207 In/Sec	.236 G-s
	.154 In/Sec	.248 G-s
SAR61NM - Spent Acid Circ Pmp N	(18-Aug-20)	
MIH - Motor Inboard Horizontal	OVERALL LEVEL	1K-20kHz
MIP - Motor Inboard Horz Peakvue	.023 In/Sec	.106 G-s
	.0091 G-s	

MIV - Motor Inboard Vertical	.029 In/Sec	.058 G-s
MIA - Motor Inboard Axial	.040 In/Sec	.017 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.016 In/Sec	.107 G-s
PIV - Pump Inboard Vertical	.038 G-s	
PIA - Pump Inboard Axial	.037 In/Sec	.117 G-s
	.041 In/Sec	.055 G-s
SAR63WM - Spent Acid Feed Pmp W	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.032 In/Sec	.039 G-s
MOV - Motor Outboard Vertical	.0061 G-s	
MOA - Motor Outboard Axial	.035 In/Sec	.010 G-s
MIH - Motor Inboard Horizontal	.045 In/Sec	.013 G-s
MIP - Motor Inboard Horz Peakvue	.042 In/Sec	.335 G-s
MIV - Motor Inboard Vertical	.024 G-s	
MIA - Motor Inboard Axial	.035 In/Sec	.093 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.031 In/Sec	.084 G-s
PIV - Pump Inboard Vertical	.060 In/Sec	.525 G-s
PIA - Pump Inboard Axial	.117 G-s	
	.052 In/Sec	.348 G-s
	.060 In/Sec	.210 G-s
SAR135 - Spent Acid Circ Pmp E	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.036 In/Sec	.113 G-s
MOV - Motor Outboard Vertical	.0058 G-s	
MOA - Motor Outboard Axial	.051 In/Sec	.018 G-s
MIH - Motor Inboard Horizontal	.046 In/Sec	.0066 G-s
MIP - Motor Inboard Horz Peakvue	.041 In/Sec	.444 G-s
MIV - Motor Inboard Vertical	.050 G-s	
MIA - Motor Inboard Axial	.035 In/Sec	.121 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.047 In/Sec	.118 G-s
PIV - Pump Inboard Vertical	.066 In/Sec	.181 G-s
PIA - Pump Inboard Axial	.035 G-s	
POH - Pump Outboard Horizontal	.084 In/Sec	.032 G-s
POP - Pump Outboard Horz Peakvue	.048 In/Sec	.065 G-s
POV - Pump Outboard Vertical	.063 In/Sec	.372 G-s
POA - Pump Outboard Axial	.160 G-s	
	.048 In/Sec	.169 G-s
	.039 In/Sec	.242 G-s
SAR63EM - Spent Acid Feed Pmp E	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.027 In/Sec	.181 G-s
MOV - Motor Outboard Vertical	.0055 G-s	
MOA - Motor Outboard Axial	.037 In/Sec	.145 G-s
MIH - Motor Inboard Horizontal	.067 In/Sec	.034 G-s
MIP - Motor Inboard Horz Peakvue	.028 In/Sec	.182 G-s
MIV - Motor Inboard Vertical	.013 G-s	
MIA - Motor Inboard Axial	.034 In/Sec	.041 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.042 In/Sec	.028 G-s
	.037 In/Sec	.140 G-s
	.013 G-s	

PIV - Pump Inboard Vertical	.022 In/Sec	.086 G-s
PIA - Pump Inboard Axial	.018 In/Sec	.053 G-s
SAR156 - Spent Acid Feed Booster N	(18-Aug-20) OVERALL LEVEL	1K-20kHz .903 G-s
MIH - Motor Inboard Horizontal	.184 In/Sec	.903 G-s
MIP - Motor Inboard Horz Peakvue	.634 G-s	
MIV - Motor Inboard Vertical	.291 In/Sec	.292 G-s
MIA - Motor Inboard Axial	.298 In/Sec	.218 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz .156 In/Sec
PIP - Pump Inboard Horz Peakvue	.128 G-s	
PIV - Pump Inboard Vertical	.082 G-s	
PIA - Pump Inboard Axial	.138 In/Sec	.182 G-s
	.080 In/Sec	.107 G-s
MON168 - A/B Booster Pump E	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz .105 In/Sec
MOP - Motor Outboard Horz Peakvue	.228 G-s	
MOV - Motor Outboard Vertical	.119 G-s	
MOA - Motor Outboard Axial	.029 In/Sec	.086 G-s
MIH - Motor Inboard Horizontal	.033 In/Sec	.062 G-s
MIP - Motor Inboard Horz Peakvue	.083 In/Sec	.237 G-s
MIV - Motor Inboard Vertical	.147 G-s	
MIA - Motor Inboard Axial	.030 In/Sec	.127 G-s
PIH - Pump Inboard Horizontal	.051 In/Sec	.118 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz .153 In/Sec
PIV - Pump Inboard Vertical	.174 G-s	
PIA - Pump Inboard Axial	.101 G-s	
	.035 In/Sec	.133 G-s
	.089 In/Sec	.089 G-s
MON73W - Skim Tub Xfer Pmp W	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz .046 In/Sec
MOP - Motor Outboard Horz Peakvue	.245 G-s	
MOV - Motor Outboard Vertical	.0078 G-s	
MOA - Motor Outboard Axial	.050 In/Sec	.054 G-s
MIH - Motor Inboard Horizontal	.053 In/Sec	.035 G-s
MIP - Motor Inboard Horz Peakvue	.044 In/Sec	.457 G-s
MIV - Motor Inboard Vertical	.179 G-s	
MIA - Motor Inboard Axial	.054 In/Sec	.269 G-s
PIH - Pump Inboard Horizontal	.074 In/Sec	.490 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz .042 In/Sec
PIV - Pump Inboard Vertical	.057 G-s	
PIA - Pump Inboard Axial	.034 G-s	
	.027 In/Sec	.036 G-s
	.025 In/Sec	.041 G-s
MON45WM - ACH Ref Brine Pump W	(18-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz .039 In/Sec
MOP - Motor Outboard Horz Peakvue	1.286 G-s	
MOV - Motor Outboard Vertical	.590 G-s	
MOA - Motor Outboard Axial	.059 In/Sec	.393 G-s
MIH - Motor Inboard Horizontal	.089 In/Sec	.217 G-s
MIP - Motor Inboard Horz Peakvue	.051 In/Sec	1.299 G-s
MIV - Motor Inboard Vertical	.636 G-s	
MIA - Motor Inboard Axial	.084 In/Sec	.473 G-s
	.090 In/Sec	.318 G-s

		OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal		.237 In/Sec	.593 G-s
PIP - Pump Inboard Horz Peakvue		.291 G-s	
PIV - Pump Inboard Vertical		.134 In/Sec	.160 G-s
PIA - Pump Inboard Axial		.111 In/Sec	.187 G-s
POH - Pump Outboard Horizontal		.115 In/Sec	1.259 G-s
POP - Pump Outboard Horz Peakvue		.702 G-s	
POV - Pump Outboard Vertical		.121 In/Sec	.381 G-s
POA - Pump Outboard Axial		.089 In/Sec	.315 G-s
 AC17 - Carrier Ref Unit	(20-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.022 In/Sec	.104 G-s	
MOV - Motor Outboard Vertical	.023 G-s		
MOA - Motor Outboard Axial	.030 In/Sec	.085 G-s	
MIH - Motor Inboard Horizontal	.014 In/Sec	.028 G-s	
MIP - Motor Inboard Horz Peakvue	.026 In/Sec	.161 G-s	
MIV - Motor Inboard Vertical	.024 G-s		
MIA - Motor Inboard Axial	.024 In/Sec	.149 G-s	
IIH - Inboard Input Horizontal	.018 In/Sec	.141 G-s	
IIP - Input Inboard Horizontal PK	.161 In/Sec		
IIV - Inboard Input Vertical	.709 G-s		
IIA - Inboard Input Axial	.085 In/Sec		
OOH - Output Outboard Horizontal	.096 In/Sec		
OOP - Output Outboard Horizontal PK	.144 In/Sec		
OOV - Output Outboard Vertical	1.028 G-s		
OOA - Output Outboard Axial	.067 In/Sec		
CIH - Compressor Inboard Horizontal	.087 In/Sec		
CIP - Compressor Inboard Horz Peakvue	.078 In/Sec		
CIV - Compressor Inboard Vertical	.636 G-s		
CIA - Compressor Inboard Axial	.111 In/Sec		
COH - Compressor Outboard Horizontal	.046 In/Sec		
COP - Compressor Outboard Horz Peakvue	.038 In/Sec		
COV - Compressor Outboard Vertical	.476 G-s		
COA - Compressor Outboard Axial	.045 In/Sec		
	.049 In/Sec		
 ACN44 - ACN Ref Unit Booster #3	(20-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.098 In/Sec	1.756 G-s	
MOV - Motor Outboard Vertical	.051 G-s		
MOA - Motor Outboard Axial	.170 In/Sec	.400 G-s	
MIH - Motor Inboard Horizontal	.105 In/Sec	.515 G-s	
MIP - Motor Inboard Horz Peakvue	.091 In/Sec	.499 G-s	
MIV - Motor Inboard Vertical	.044 G-s		
MIA - Motor Inboard Axial	.116 In/Sec	.192 G-s	
	.096 In/Sec	.206 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz	
PIP - Pump Inboard Horz Peakvue	.105 In/Sec	.892 G-s	
PIV - Pump Inboard Vertical	.385 G-s		
PIA - Pump Inboard Axial	.167 In/Sec	.349 G-s	
POH - Pump Outboard Horizontal	.139 In/Sec	.258 G-s	
POP - Pump Outboard Horz Peakvue	.098 In/Sec	.412 G-s	
POV - Pump Outboard Vertical	.178 G-s		
POA - Pump Outboard Axial	.177 In/Sec	.174 G-s	
	.140 In/Sec	.131 G-s	

Clarification Of Vibration Units:
 Acc --> G-s RMS
 Vel --> In/Sec PK
 Dsp --> Mils P-P

Abbreviated Last Measurement

Summary

Database: Lucite Memphis MMA.rbm
Area: MMA
Route No. 7: TJ ROUTE 2
Report Date: 03-Sep-20 10:39

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
MON80 - Uninhibited Mon Tank Pump N	(17-Aug-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.047 In/Sec	.193 G-s
MOP - Motor Outboard Horz Peakvue	.011 G-s	
MOV - MotorOutboard Vertical	.051 In/Sec	.534 G-s
MOA - Motor Outboard Axial	.111 In/Sec	.200 G-s
MIH - Motor Inboard Horizontal	.093 In/Sec	.228 G-s
MIP - Motor Inboard Horz Peakvue	.0056 G-s	
MIV - Motor Inboard Vertical	.123 In/Sec	.098 G-s
MIA - Motor Inboard Axial	.118 In/Sec	.016 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL .150 In/Sec	1K-20KHz .099 G-s
PIP - Pump Inboard Horz Peakvue	.0030 G-s	
PIV - Pump Inboard Vertical	.042 In/Sec	.082 G-s
PIA - Pump Inboard Axial	.067 In/Sec	.080 G-s
MON81 - Uninhibited Mon Tank Pump S	(17-Aug-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.051 In/Sec	.148 G-s
MOP - Motor Outboard Horz Peakvue	.0075 G-s	
MOV - MotorOutboard Vertical	.043 In/Sec	.066 G-s
MOA - Motor Outboard Axial	.043 In/Sec	.025 G-s
MIH - Motor Inboard Horizontal	.053 In/Sec	.183 G-s
MIP - Motor Inboard Horz Peakvue	.027 G-s	
MIV - Motor Inboard Vertical	.038 In/Sec	.051 G-s
MIA - Motor Inboard Axial	.042 In/Sec	.057 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL .232 In/Sec	1K-20KHz .414 G-s
PIP - Pump Inboard Horz Peakvue	.038 G-s	
PIV - Pump Inboard Vertical	.176 In/Sec	.199 G-s
PIA - Pump Inboard Axial	.130 In/Sec	.140 G-s
MON56 - Inhibited Mon Xfer Pump E	(17-Aug-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.074 In/Sec	.350 G-s
MOP - Motor Outboard Horz Peakvue	.020 G-s	
MOV - Motor Outboard Vertical	.070 In/Sec	.047 G-s
MOA - Motor Outboard Axial	.103 In/Sec	.080 G-s
MIH - Motor Inboard Horizontal	.099 In/Sec	.313 G-s
MIP - Motor Inboard Horz Peakvue	.077 G-s	
MIV - Motor Inboard Vertical	.065 In/Sec	.085 G-s

MIA - Motor Inboard Axial	.119 In/Sec	.070 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.315 In/Sec	1.228 G-s
PIV - Pump Inboard Vertical	.107 G-s	
PIA - Pump Inboard Axial	.251 In/Sec	.640 G-s
	.398 In/Sec	.497 G-s
MON40 - Acetone Pump	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.028 In/Sec	.479 G-s
MOV - Motor Outboard Vertical	.060 G-s	
MOA - Motor Outboard Axial	.034 In/Sec	.153 G-s
MIH - Motor Inboard Horizontal	.017 In/Sec	.076 G-s
MIP - Motor Inboard Horz Peakvue	.026 In/Sec	1.100 G-s
MIV - Motor Inboard Vertical	.149 G-s	
MIA - Motor Inboard Axial	.039 In/Sec	.120 G-s
PIH - Pump Inboard Horizontal	.043 In/Sec	.139 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
PIV - Pump Inboard Vertical	.131 In/Sec	.734 G-s
PIA - Pump Inboard Axial	.087 G-s	
	.112 In/Sec	.779 G-s
	.134 In/Sec	.445 G-s
ACN08 - ACH Blend Tank	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.043 In/Sec	.153 G-s
MOV - Motor Outboard Vertical	.014 G-s	
MOA - Motor Outboard Axial	.426 In/Sec	.094 G-s
MIH - Motor Inboard Horizontal	.169 In/Sec	.049 G-s
MIP - Motor Inboard Horz Peakvue	.087 In/Sec	.203 G-s
MIV - Motor Inboard Vertical	.030 G-s	
MIA - Motor Inboard Axial	.328 In/Sec	.064 G-s
PIH - Pump Inboard Horizontal	.188 In/Sec	.036 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
PIV - Pump Inboard Vertical	.094 In/Sec	.424 G-s
PIA - Pump Inboard Axial	.122 G-s	
	.070 In/Sec	.135 G-s
	.073 In/Sec	.125 G-s
ACN07C - ACH Prod Feed Pump S	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.089 In/Sec	.988 G-s
MOV - Motor Outboard Vertical	.487 G-s	
MOA - Motor Outboard Axial	.103 In/Sec	.400 G-s
MIH - Motor Inboard Horizontal	.137 In/Sec	.283 G-s
MIP - Motor Inboard Horz Peakvue	.070 In/Sec	2.337 G-s
MIV - Motor Inboard Vertical	.605 G-s	
MIA - Motor Inboard Axial	.076 In/Sec	.557 G-s
PIH - Pump Inboard Horizontal	.060 In/Sec	.470 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
PIV - Pump Inboard Vertical	.187 In/Sec	1.681 G-s
PIA - Pump Inboard Axial	.331 G-s	
	.209 In/Sec	.739 G-s
	.157 In/Sec	.935 G-s
MON85E - Water Treatment Pmp E	(17-Aug-20)	
	OVERALL LEVEL	1K-20kHz

MOH - Motor Outboard Horizontal	.175 In/Sec	.680 G-s
MOP - Motor Outboard Horz Peakvue	.181 G-s	
MOV - Motor Outboard Vertical	.094 In/Sec	.211 G-s
MOA - Motor Outboard Axial	.087 In/Sec	.147 G-s
MIH - Motor Inboard Horizontal	.150 In/Sec	.390 G-s
MIP - Motor Inboard Horz Peakvue	.094 G-s	
MIV - Motor Inboard Vertical	.127 In/Sec	.073 G-s
MIA - Motor Inboard Axial	.134 In/Sec	.044 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.148 In/Sec	.629 G-s
PIP - Pump Inboard Horz Peakvue	.427 G-s	
PIV - Pump Inboard Vertical	.144 In/Sec	.443 G-s
PIA - Pump Inboard Axial	.101 In/Sec	.265 G-s
MON85W - Water Treatment Pmp W	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.107 In/Sec	.398 G-s
MOV - Motor Outboard Vertical	.094 G-s	
MOA - Motor Outboard Axial	.162 In/Sec	.206 G-s
MIH - Motor Inboard Horizontal	.129 In/Sec	.128 G-s
MIP - Motor Inboard Horz Peakvue	.111 In/Sec	.361 G-s
MIV - Motor Inboard Vertical	.162 G-s	
MIA - Motor Inboard Axial	.104 In/Sec	.213 G-s
PIH - Pump Inboard Horizontal	.125 In/Sec	.114 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
PIV - Pump Inboard Vertical	.130 In/Sec	.571 G-s
PIA - Pump Inboard Axial	.421 G-s	
	.137 In/Sec	.437 G-s
	.118 In/Sec	.354 G-s
ACN28B - ACN Fan E	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.228 In/Sec	1.040 G-s
MOV - Motor Outboard Vertical	.366 G-s	
MOA - Motor Outboard Axial	.230 In/Sec	.350 G-s
MIH - Motor Inboard Horizontal	.120 In/Sec	.144 G-s
MIP - Motor Inboard Horz Peakvue	.246 In/Sec	.989 G-s
MIV - Motor Inboard Vertical	.432 G-s	
MIA - Motor Inboard Axial	.478 In/Sec	.286 G-s
	.122 In/Sec	.399 G-s
ACN28A - ACN Fan W	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.122 In/Sec	.585 G-s
MOV - Motor Outboard Vertical	.195 G-s	
MOA - Motor Outboard Axial	.212 In/Sec	.270 G-s
MIH - Motor Inboard Horizontal	.197 In/Sec	.129 G-s
MIP - Motor Inboard Horz Peakvue	.254 In/Sec	1.368 G-s
MIV - Motor Inboard Vertical	.367 G-s	
MIA - Motor Inboard Axial	.153 In/Sec	.590 G-s
	.214 In/Sec	.312 G-s
ACN29C - ACN Cool Twr Pump S	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.050 In/Sec	.660 G-s
MOV - Motor Outboard Vertical	.306 G-s	
	.069 In/Sec	.246 G-s

MOA - Motor Outboard Axial	.048 In/Sec	.196 G-s
MIH - Motor Inboard Horizontal	.041 In/Sec	.468 G-s
MIP - Motor Inboard Horz Peakvue	.197 G-s	
MIV - Motor Inboard Vertical	.060 In/Sec	.309 G-s
MIA - Motor Inboard Axial	.040 In/Sec	.278 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.165 In/Sec	.778 G-s
PIP - Pump Inboard Horz Peakvue	.433 G-s	
PIV - Pump Inboard Vertical	.151 In/Sec	1.018 G-s
PIA - Pump Inboard Axial	.132 In/Sec	.748 G-s
POH - Pump Outboard Horizontal	.092 In/Sec	1.307 G-s
POP - Pump Outboard Horz Peakvue	.319 G-s	
POV - Pump Outboard Vertical	.091 In/Sec	.313 G-s
POA - Pump Outboard Axial	.100 In/Sec	.304 G-s
ACN29B - ACN Cool Twr Pump M	(17-Aug-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.051 In/Sec	.687 G-s
MOP - Motor Outboard Horz Peakvue	.331 G-s	
MOV - Motor Outboard Vertical	.050 In/Sec	.223 G-s
MOA - Motor Outboard Axial	.059 In/Sec	.176 G-s
MIH - Motor Inboard Horizontal	.052 In/Sec	1.087 G-s
MIP - Motor Inboard Horz Peakvue	.305 G-s	
MIV - Motor Inboard Vertical	.070 In/Sec	.245 G-s
MIA - Motor Inboard Axial	.062 In/Sec	.264 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.160 In/Sec	.432 G-s
PIP - Pump Inboard Horz Peakvue	.289 G-s	
PIV - Pump Inboard Vertical	.087 In/Sec	.134 G-s
PIA - Pump Inboard Axial	.107 In/Sec	.174 G-s
POH - Pump Outboard Horizontal	.082 In/Sec	.742 G-s
POP - Pump Outboard Horz Peakvue	.537 G-s	
POV - Pump Outboard Vertical	.097 In/Sec	.156 G-s
POA - Pump Outboard Axial	.105 In/Sec	.251 G-s
ACN29A - ACN Cool Twr Pump N	(17-Aug-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.061 In/Sec	.908 G-s
MOP - Motor Outboard Horz Peakvue	.167 G-s	
MOV - Motor Outboard Vertical	.050 In/Sec	.426 G-s
MOA - Motor Outboard Axial	.038 In/Sec	.300 G-s
MIH - Motor Inboard Horizontal	.087 In/Sec	1.537 G-s
MIP - Motor Inboard Horz Peakvue	.205 G-s	
MIV - Motor Inboard Vertical	.059 In/Sec	.365 G-s
MIA - Motor Inboard Axial	.074 In/Sec	1.001 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.212 In/Sec	.375 G-s
PIP - Pump Inboard Horz Peakvue	.120 G-s	
PIV - Pump Inboard Vertical	.121 In/Sec	.151 G-s
PIA - Pump Inboard Axial	.144 In/Sec	.164 G-s
POH - Pump Outboard Horizontal	.091 In/Sec	.988 G-s
POP - Pump Outboard Horz Peakvue	.609 G-s	
POV - Pump Outboard Vertical	.079 In/Sec	.389 G-s
POA - Pump Outboard Axial	.129 In/Sec	.278 G-s
ACN36 - ACH Neut Tank Circ Pmp	(20-Aug-20)	
	OVERALL LEVEL	1K-20kHz

MIH - Motor Inboard Horizontal	.116 In/Sec	.372 G-s
MIP - Motor Inboard Horz Peakvue	.066 G-s	
MIV - Motor Inboard Vertical	.098 In/Sec	.126 G-s
MIA - Motor Inboard Axial	.129 In/Sec	.056 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.388 In/Sec	.145 G-s
PIP - Pump Inboard Horz Peakvue	.016 G-s	
PIV - Pump Inboard Vertical	.244 In/Sec	.140 G-s
PIA - Pump Inboard Axial	.460 In/Sec	.233 G-s
 ACN12 - #1 Kettle Xfer Pump	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.047 In/Sec	.327 G-s
MOV - Motor Outboard Vertical	.047 G-s	
MOA - Motor Outboard Axial	.098 In/Sec	.147 G-s
MIH - Motor Inboard Horizontal	.059 In/Sec	.102 G-s
MIP - Motor Inboard Horz Peakvue	.034 In/Sec	.617 G-s
MIV - Motor Inboard Vertical	.091 G-s	
MIA - Motor Inboard Axial	.072 In/Sec	.235 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.052 In/Sec	.127 G-s
PIP - Pump Inboard Horz Peakvue	.054 In/Sec	.110 G-s
PIV - Pump Inboard Vertical	.022 G-s	
PIA - Pump Inboard Axial	.053 In/Sec	.127 G-s
.052 In/Sec	.140 G-s	
 ACN10 - #1 Kettle Circ Pmp	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.021 In/Sec	.345 G-s
MOV - Motor Outboard Vertical	.185 G-s	
MOA - Motor Outboard Axial	.032 In/Sec	.186 G-s
MIH - Motor Inboard Horizontal	.028 In/Sec	.105 G-s
MIP - Motor Inboard Horz Peakvue	.023 In/Sec	.520 G-s
MIV - Motor Inboard Vertical	.215 G-s	
MIA - Motor Inboard Axial	.026 In/Sec	.211 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.020 In/Sec	.170 G-s
PIP - Pump Inboard Horz Peakvue	.048 In/Sec	.224 G-s
PIV - Pump Inboard Vertical	.180 G-s	
PIA - Pump Inboard Axial	.046 In/Sec	.155 G-s
.035 In/Sec	.141 G-s	
 ACN13A - #2 Kettle Xfer Pump N	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.124 In/Sec	.916 G-s
MOV - Motor Outboard Vertical	.224 G-s	
MOA - Motor Outboard Axial	.113 In/Sec	.451 G-s
MIH - Motor Inboard Horizontal	.099 In/Sec	.740 G-s
MIP - Motor Inboard Horz Peakvue	.139 In/Sec	3.111 G-s
MIV - Motor Inboard Vertical	.337 G-s	
MIA - Motor Inboard Axial	.101 In/Sec	.851 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.121 In/Sec	.646 G-s
PIP - Pump Inboard Horz Peakvue	.078 In/Sec	.734 G-s
PIV - Pump Inboard Vertical	.118 G-s	
PIA - Pump Inboard Axial	.087 In/Sec	.614 G-s
.062 In/Sec	.490 G-s	

ACN11	- #2 Kettle Circ Pump	(20-Aug-20)	
MOH -	Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP -	Motor Outboard Horz Peakvue	.023 In/Sec	.560 G-s
MOV -	Motor Outboard Vertical	.292 G-s	
MOA -	Motor Outboard Axial	.038 In/Sec	.167 G-s
MIH -	Motor Inboard Horizontal	.041 In/Sec	.108 G-s
MIP -	Motor Inboard Horz Peakvue	.022 In/Sec	.582 G-s
MIV -	Motor Inboard Vertical	.322 G-s	
MIA -	Motor Inboard Axial	.045 In/Sec	.128 G-s
		.033 In/Sec	.147 G-s
PIH -	Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP -	Pump Inboard Horz Peakvue	.043 In/Sec	.270 G-s
PIV -	Pump Inboard Vertical	.180 G-s	
PIA -	Pump Inboard Axial	.100 In/Sec	.218 G-s
		.025 In/Sec	.144 G-s
ACN09	- ACH Flash Tank Pump	(20-Aug-20)	
MOH -	Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP -	Motor Outboard Horz Peakvue	.111 In/Sec	.434 G-s
MOV -	Motor Outboard Vertical	.023 G-s	
MOA -	Motor Outboard Axial	.096 In/Sec	.206 G-s
		.086 In/Sec	.128 G-s
PIH -	Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP -	Pump Inboard Horz Peakvue	.060 In/Sec	.241 G-s
PIV -	Pump Inboard Vertical	.062 G-s	
PIA -	Pump Inboard Axial	.069 In/Sec	.373 G-s
		.049 In/Sec	.276 G-s
ACN16	- ACH Scrb Circ PumpN	(20-Aug-20)	
MOH -	Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP -	Motor Outboard Horz Peakvue	.073 In/Sec	.229 G-s
MOV -	Motor Outboard Vertical	.100 G-s	
MOA -	Motor Outboard Axial	.031 In/Sec	.123 G-s
MIH -	Motor Inboard Horizontal	.067 In/Sec	.090 G-s
MIP -	Motor Inboard Horz Peakvue	.055 In/Sec	.328 G-s
MIV -	Motor Inboard Vertical	.172 G-s	
MIA -	Motor Inboard Axial	.055 In/Sec	.169 G-s
		.053 In/Sec	.073 G-s
PIH -	Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP -	Pump Inboard Horz Peakvue	.146 In/Sec	.331 G-s
PIV -	Pump Inboard Vertical	.257 G-s	
PIA -	Pump Inboard Axial	.076 In/Sec	.114 G-s
		.073 In/Sec	.103 G-s
ACN30	- ACH Scrubber Xfer Pmp	(20-Aug-20)	
MOH -	Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP -	Motor Outboard Horz Peakvue	.044 In/Sec	.391 G-s
MOV -	Motor Outboard Vertical	.222 G-s	
MOA -	Motor Outboard Axial	.057 In/Sec	.165 G-s
MIH -	Motor Inboard Horizontal	.102 In/Sec	.143 G-s
MIP -	Motor Inboard Horz Peakvue	.056 In/Sec	.518 G-s
MIV -	Motor Inboard Vertical	.406 G-s	
MIA -	Motor Inboard Axial	.082 In/Sec	.204 G-s
		.085 In/Sec	.141 G-s
PIH -	Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
		.045 In/Sec	.116 G-s

PIP - Pump Inboard Horz Peakvue	.096 G-s	
PIV - Pump Inboard Vertical	.058 In/Sec	.080 G-s
PIA - Pump Inboard Axial	.041 In/Sec	.075 G-s
 ACN05B - Topp Column Xfer Pmp E	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.087 In/Sec	.319 G-s
MOV - Motor Outboard Vertical	.073 G-s	
MOA - Motor Outboard Axial	.062 In/Sec	.151 G-s
MIH - Motor Inboard Horizontal	.101 In/Sec	.069 G-s
MIP - Motor Inboard Horz Peakvue	.084 In/Sec	1.184 G-s
MIV - Motor Inboard Vertical	.116 G-s	
MIA - Motor Inboard Axial	.044 In/Sec	.137 G-s
PIH - Pump Inboard Horizontal	.031 In/Sec	.122 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
PIV - Pump Inboard Vertical	.104 In/Sec	1.260 G-s
PIA - Pump Inboard Axial	.456 G-s	
	.135 In/Sec	.683 G-s
	.076 In/Sec	.508 G-s
 ACN04 - Topping Col Circ Pump	(20-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.030 In/Sec	.201 G-s
MOV - Motor Outboard Vertical	.107 G-s	
MOA - Motor Outboard Axial	.034 In/Sec	.066 G-s
MIH - Motor Inboard Horizontal	.040 In/Sec	.061 G-s
MIP - Motor Inboard Horz Peakvue	.023 In/Sec	.485 G-s
MIV - Motor Inboard Vertical	.308 G-s	
MIA - Motor Inboard Axial	.029 In/Sec	.174 G-s
PIH - Pump Inboard Horizontal	.030 In/Sec	.093 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
PIV - Pump Inboard Vertical	.123 In/Sec	.368 G-s
PIA - Pump Inboard Axial	.246 G-s	
POH - Pump Outboard Horizontal	.057 In/Sec	.239 G-s
POP - Pump Outboard Horz Peakvue	.056 In/Sec	.267 G-s
POV - Pump Outboard Vertical	.061 In/Sec	.416 G-s
POA - Pump Outboard Axial	.267 G-s	
	.070 In/Sec	.131 G-s
	.054 In/Sec	.114 G-s
 MON38CNM - LBS Tails Pump N	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.045 In/Sec	.474 G-s
MOV - Motor Outboard Vertical	.039 G-s	
MOA - Motor Outboard Axial	.096 In/Sec	.133 G-s
MIH - Motor Inboard Horizontal	.053 In/Sec	.115 G-s
MIP - Motor Inboard Horz Peakvue	.045 In/Sec	.677 G-s
MIV - Motor Inboard Vertical	.130 G-s	
MIA - Motor Inboard Axial	.080 In/Sec	.134 G-s
PIH - Pump Inboard Horizontal	.051 In/Sec	.077 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
PIV - Pump Inboard Vertical	.080 In/Sec	1.485 G-s
PIA - Pump Inboard Axial	.306 G-s	
	.089 In/Sec	.719 G-s
	.066 In/Sec	.495 G-s
 MON38CSM - LBS Tails Pump S	(17-Aug-20)	

		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.035 In/Sec	.202 G-s	
MOP - Motor Outboard Horz Peakvue	.037 G-s		
MOV - Motor Outboard Vertical	.041 In/Sec	.076 G-s	
MOA - Motor Outboard Axial	.050 In/Sec	.114 G-s	
MIH - Motor Inboard Horizontal	.050 In/Sec	.662 G-s	
MIP - Motor Inboard Horz Peakvue	.043 G-s		
MIV - Motor Inboard Vertical	.056 In/Sec	.083 G-s	
MIA - Motor Inboard Axial	.041 In/Sec	.049 G-s	
	OVERALL LEVEL	1K-20kHz	
PIH - Pump Inboard Horizontal	.085 In/Sec	.353 G-s	
PIP - Pump Inboard Horz Peakvue	.029 G-s		
PIV - Pump Inboard Vertical	.064 In/Sec	.162 G-s	
PIA - Pump Inboard Axial	.057 In/Sec	.126 G-s	
MON 63W - LBS Side Stream Pump W	(17-Aug-20)		
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.074 In/Sec	.830 G-s	
M1V - Motor Outboard Vertical	.031 G-s		
M1A - Motor Outboard Axial	.092 In/Sec	.673 G-s	
M2H - Motor Inboard Horizontal	.104 In/Sec	.946 G-s	
M2P - Motor Inboard Horz Peakvue	.067 In/Sec	1.141 G-s	
M2V - Motor Inboard Vertical	.071 G-s		
M2A - Motor Inboard Axial	.136 In/Sec	.333 G-s	
P1H - Pump Inboard Horizontal	.109 In/Sec	.264 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
P1V - Pump Inboard Vertical	.293 In/Sec	.606 G-s	
P1A - Pump Inboard Axial	.192 G-s		
	.182 In/Sec	.833 G-s	
	.204 In/Sec	.900 G-s	
MON 63E - LBS Side Stream Pump E	(17-Aug-20)		
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.105 In/Sec	.682 G-s	
M1V - Motor Outboard Vertical	.016 G-s		
M1A - Motor Outboard Axial	.266 In/Sec	.163 G-s	
M2H - Motor Inboard Horizontal	.184 In/Sec	.251 G-s	
M2P - Motor Inboard Horz Peakvue	.163 In/Sec	.812 G-s	
M2V - Motor Inboard Vertical	.069 G-s		
M2A - Motor Inboard Axial	.297 In/Sec	.343 G-s	
P1H - Pump Inboard Horizontal	.145 In/Sec	.285 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
P1V - Pump Inboard Vertical	.222 In/Sec	.510 G-s	
P1A - Pump Inboard Axial	.097 G-s		
	.231 In/Sec	.349 G-s	
	.163 In/Sec	.297 G-s	
MON132 - Decanter Feed Pmp Spare	(17-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.083 In/Sec	.145 G-s	
MOV - Motor Outboard Vertical	.018 G-s		
MOA - Motor Outboard Axial	.103 In/Sec	.045 G-s	
MIH - Motor Inboard Horizontal	.221 In/Sec	.043 G-s	
MIP - Motor Inboard Horz Peakvue	.053 In/Sec	.263 G-s	
MIV - Motor Inboard Vertical	.087 G-s		
MIA - Motor Inboard Axial	.110 In/Sec	.108 G-s	
	.124 In/Sec	.075 G-s	

		OVERALL LEVEL	1K-20kHz
PIH - Pump Inboard Horizontal		.152 In/Sec	.767 G-s
PIP - Pump Inboard Horz Peakvue		.190 G-s	
PIV - Pump Inboard Vertical		.356 In/Sec	.362 G-s
PIA - Pump Inboard Axial		.070 In/Sec	.333 G-s
MON50 - Decanter Feed Pump	(20-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.054 In/Sec	.436 G-s	
MOV - Motor Outboard Vertical	.084 G-s		
MOA - Motor Outboard Axial	.048 In/Sec	.326 G-s	
MIH - Motor Inboard Horizontal	.092 In/Sec	.177 G-s	
MIP - Motor Inboard Horz Peakvue	.055 In/Sec	.462 G-s	
MIV - Motor Inboard Vertical	.070 G-s		
MIA - Motor Inboard Axial	.055 In/Sec	.266 G-s	
PIH - Pump Inboard Horizontal	.083 In/Sec	.095 G-s	
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
PIV - Pump Inboard Vertical	.245 In/Sec	.700 G-s	
PIA - Pump Inboard Axial	.173 G-s		
	.204 In/Sec	.262 G-s	
	.198 In/Sec	.844 G-s	
MON 51 - WCM Tails Swing/Spare Pmp	(20-Aug-20)		
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.082 In/Sec	.103 G-s	
M1V - Motor Outboard Vertical	.013 G-s		
M1A - Motor Outboard Axial	.028 In/Sec	.037 G-s	
M2H - Motor Inboard Horizontal	.028 In/Sec	.043 G-s	
M2P - Motor Inboard Horz Peakvue	.081 In/Sec	.400 G-s	
M2V - Motor Inboard Vertical	.046 G-s		
M2A - Motor Inboard Axial	.036 In/Sec	.092 G-s	
P1H - Pump Inboard Horizontal	.034 In/Sec	.060 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
P1V - Pump Inboard Vertical	.133 In/Sec	.221 G-s	
P1A - Pump Inboard Axial	.019 G-s		
P2H - Pump Outboard Horizontal	.058 In/Sec	.186 G-s	
P2P - Pump Outboard Horz Peakvue	.098 In/Sec	.098 G-s	
P2V - Pump Outboard Vertical	.133 In/Sec	.142 G-s	
P2A - Pump Outboard Axial	.0086 G-s		
	.062 In/Sec	.110 G-s	
	.095 In/Sec	.111 G-s	
MON84 - WCM Tails Pump S	(17-Aug-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.089 In/Sec	1.206 G-s	
MOV - Motor Outboard Vertical	.0097 G-s		
MOA - Motor Outboard Axial	.059 In/Sec	.128 G-s	
MIH - Motor Inboard Horizontal	.084 In/Sec	.061 G-s	
MIP - Motor Inboard Horz Peakvue	.069 In/Sec	.488 G-s	
MIV - Motor Inboard Vertical	.032 G-s		
MIA - Motor Inboard Axial	.102 In/Sec	.110 G-s	
PIH - Pump Inboard Horizontal	.076 In/Sec	.062 G-s	
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
PIV - Pump Inboard Vertical	.106 In/Sec	.418 G-s	
PIA - Pump Inboard Axial	.126 G-s		
	.098 In/Sec	.338 G-s	
	.093 In/Sec	.281 G-s	

MON38A	- LBS Reflux Pmp S	(17-Aug-20)	
MOH - Motor Outboard Horizontal		OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.048 In/Sec	.362 G-s	
MOV - Motor Outboard Vertical	.150 G-s		
MOA - Motor Outboard Axial	.044 In/Sec	.233 G-s	
MIH - Motor Inboard Horizontal	.065 In/Sec	.173 G-s	
MIP - Motor Inboard Horz Peakvue	.043 In/Sec	.477 G-s	
MIV - Motor Inboard Vertical	.044 G-s		
MIA - Motor Inboard Axial	.065 In/Sec	.072 G-s	
	.073 In/Sec	.114 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz	
PIP - Pump Inboard Horz Peakvue	.061 In/Sec	.920 G-s	
PIV - Pump Inboard Vertical	.118 G-s		
PIA - Pump Inboard Axial	.060 In/Sec	.519 G-s	
	.066 In/Sec	.277 G-s	
MON38B	- LBS Reflux Pmp N	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.092 In/Sec	.551 G-s	
MOV - Motor Outboard Vertical	.065 G-s		
MOA - Motor Outboard Axial	.092 In/Sec	.141 G-s	
MIH - Motor Inboard Horizontal	.055 In/Sec	.112 G-s	
MIP - Motor Inboard Horz Peakvue	.050 In/Sec	.512 G-s	
MIV - Motor Inboard Vertical	.170 G-s		
MIA - Motor Inboard Axial	.116 In/Sec	.068 G-s	
	.057 In/Sec	.094 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz	
PIP - Pump Inboard Horz Peakvue	.098 In/Sec	.769 G-s	
PIV - Pump Inboard Vertical	.089 G-s		
PIA - Pump Inboard Axial	.129 In/Sec	.392 G-s	
	.131 In/Sec	.257 G-s	
MON 32B	- ARC Reflux Pmp S	(17-Aug-20)	
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.070 In/Sec	.338 G-s	
M1V - Motor Outboard Vertical	.031 G-s		
M1A - Motor Outboard Axial	.083 In/Sec	.149 G-s	
M2H - Motor Inboard Horizontal	.098 In/Sec	.133 G-s	
M2P - Motor Inboard Horz Peakvue	.047 In/Sec	.528 G-s	
M2V - Motor Inboard Vertical	.090 G-s		
M2A - Motor Inboard Axial	.126 In/Sec	.141 G-s	
	.085 In/Sec	.184 G-s	
P1H - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz	
P1P - Pump Inboard Horz Peakvue	.156 In/Sec	.397 G-s	
P1V - Pump Inboard Vertical	.028 G-s		
P1A - Pump Inboard Axial	.161 In/Sec	.206 G-s	
P2H - Pump Outboard Horizontal	.174 In/Sec	.340 G-s	
P2P - Pump Outboard Horz Peakvue	.099 In/Sec	.380 G-s	
P2V - Pump Outboard Vertical	.104 G-s		
P2A - Pump Outboard Axial	.156 In/Sec	.429 G-s	
	.135 In/Sec	.231 G-s	
MON 32A	- ARC Reflux Pmp N	(17-Aug-20)	
M1V - Motor Outboard Vertical	OVERALL LEVEL	1K-20kHz	
M1A - Motor Outboard Axial	.047 In/Sec	.154 G-s	

M2H - Motor Inboard Horizontal	.051 In/Sec	.304 G-s
M2P - Motor Inboard Horz Peakvue	.033 G-s	
M2V - Motor Inboard Vertical	.060 In/Sec	.127 G-s
M2A - Motor Inboard Axial	.065 In/Sec	.068 G-s
	OVERALL LEVEL	1K-20kHz
P1H - Pump Inboard Horizontal	.059 In/Sec	.361 G-s
P1P - Pump Inboard Horz Peakvue	.064 G-s	
P1V - Pump Inboard Vertical	.108 In/Sec	.295 G-s
P1A - Pump Inboard Axial	.083 In/Sec	.273 G-s
P2H - Pump Outboard Horizontal	.069 In/Sec	.366 G-s
P2P - Pump Outboard Horz Peakvue	.041 G-s	
P2V - Pump Outboard Vertical	.106 In/Sec	.510 G-s
P2A - Pump Outboard Axial	.071 In/Sec	.316 G-s
	OVERALL LEVEL	1K-20kHz
M1H - Motor Outboard Horizontal	.053 In/Sec	.354 G-s
M1P - Motor Outboard Horz Peakvue	.042 G-s	
MON118 - Tempered H2O Pmp	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.072 In/Sec	.255 G-s
MOV - Motor Outboard Vertical	.059 G-s	
MOA - Motor Outboard Axial	.032 In/Sec	.121 G-s
MIH - Motor Inboard Horizontal	.066 In/Sec	.026 G-s
MIP - Motor Inboard Horz Peakvue	.069 In/Sec	.159 G-s
MIV - Motor Inboard Vertical	.092 G-s	
MIA - Motor Inboard Axial	.048 In/Sec	.073 G-s
	OVERALL LEVEL	1K-20kHz
PIH - Pump Inboard Horizontal	.057 In/Sec	.141 G-s
PIP - Pump Inboard Horz Peakvue	.039 In/Sec	.068 G-s
PIV - Pump Inboard Vertical	.047 G-s	
PIA - Pump Inboard Axial	.037 In/Sec	.025 G-s
POH - Pump Outboard Horizontal	.034 In/Sec	.027 G-s
POP - Pump Outboard Horz Peakvue	.049 In/Sec	.049 G-s
POV - Pump Outboard Vertical	.031 G-s	
POA - Pump Outboard Axial	.032 In/Sec	.024 G-s
	OVERALL LEVEL	1K-20kHz
MON55SM - HUT Pump S	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.051 In/Sec	2.491 G-s
MOV - Motor Outboard Vertical	1.551 G-s	
MOA - Motor Outboard Axial	.057 In/Sec	.957 G-s
MIH - Motor Inboard Horizontal	.051 In/Sec	.496 G-s
MIP - Motor Inboard Horz Peakvue	.047 In/Sec	2.809 G-s
MIV - Motor Inboard Vertical	1.284 G-s	
MIA - Motor Inboard Axial	.058 In/Sec	.781 G-s
	OVERALL LEVEL	1K-20kHz
PIH - Pump Inboard Horizontal	.063 In/Sec	.491 G-s
PIP - Pump Inboard Horz Peakvue	.122 In/Sec	.661 G-s
PIV - Pump Inboard Vertical	.357 G-s	
PIA - Pump Inboard Axial	.086 In/Sec	.444 G-s
POH - Pump Outboard Horizontal	.087 In/Sec	.389 G-s
POP - Pump Outboard Horz Peakvue	.084 In/Sec	.510 G-s
POV - Pump Outboard Vertical	.154 G-s	
POA - Pump Outboard Axial	.085 In/Sec	.222 G-s
	OVERALL LEVEL	1K-20kHz

MON67NM	- PTZ Xfer Pump N	(17-Aug-20)	
MOH - Motor Outboard Horizontal		OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.083 In/Sec	.232 G-s	
MOV - Motor Outboard Vertical	.027 G-s		
MOA - Motor Outboard Axial	.063 In/Sec	.141 G-s	
MIH - Motor Inboard Horizontal	.112 In/Sec	.146 G-s	
MIP - Motor Inboard Horz Peakvue	.115 In/Sec	.483 G-s	
MIV - Motor Inboard Vertical	.052 G-s		
MIA - Motor Inboard Axial	.118 In/Sec	.233 G-s	
PIH - Pump Inboard Horizontal	.108 In/Sec	.148 G-s	
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
PIV - Pump Inboard Vertical	.129 In/Sec	.611 G-s	
PIA - Pump Inboard Axial	.062 G-s		
	.067 In/Sec	.301 G-s	
	.048 In/Sec	.279 G-s	
MON68A	- #1 Reactor H2O Circ Pump	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.129 In/Sec	.272 G-s	
MOV - Motor Outboard Vertical	.100 G-s		
MOA - Motor Outboard Axial	.051 In/Sec	.172 G-s	
MIH - Motor Inboard Horizontal	.097 In/Sec	.051 G-s	
MIP - Motor Inboard Horz Peakvue	.119 In/Sec	.234 G-s	
MIV - Motor Inboard Vertical	.080 G-s		
MIA - Motor Inboard Axial	.056 In/Sec	.050 G-s	
PIH - Pump Inboard Horizontal	.065 In/Sec	.031 G-s	
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
PIV - Pump Inboard Vertical	.077 In/Sec	.210 G-s	
PIA - Pump Inboard Axial	.118 G-s		
	.056 In/Sec	.272 G-s	
	.071 In/Sec	.258 G-s	
MON43A	- Amide Reactor Circ Pmp #1N	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.070 In/Sec	.125 G-s	
MOV - Motor Outboard Vertical	.029 G-s		
MOA - Motor Outboard Axial	.079 In/Sec	.060 G-s	
MIH - Motor Inboard Horizontal	.123 In/Sec	.023 G-s	
MIP - Motor Inboard Horz Peakvue	.078 In/Sec	.435 G-s	
MIV - Motor Inboard Vertical	.069 G-s		
MIA - Motor Inboard Axial	.091 In/Sec	.113 G-s	
PIH - Pump Inboard Horizontal	.112 In/Sec	.188 G-s	
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
PIV - Pump Inboard Vertical	.282 In/Sec	.318 G-s	
PIA - Pump Inboard Axial	.183 G-s		
	.178 In/Sec	.194 G-s	
	.246 In/Sec	.168 G-s	
MON43B	- Amide Reactor Circ Pmp #2S	(17-Aug-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.100 In/Sec	.133 G-s	
MOV - Motor Outboard Vertical	.036 G-s		
MOA - Motor Outboard Axial	.092 In/Sec	.070 G-s	
MIH - Motor Inboard Horizontal	.077 In/Sec	.065 G-s	
MIP - Motor Inboard Horz Peakvue	.092 In/Sec	.073 G-s	
MIV - Motor Inboard Vertical	.0085 G-s		
	.112 In/Sec	.025 G-s	

MIA - Motor Inboard Axial	.069 In/Sec	.021 G-s
	OVERALL LEVEL	1K-20kHz
PIH - Pump Inboard Horizontal	.211 In/Sec	.285 G-s
PIP - Pump Inboard Horz Peakvue	.130 G-s	
PIV - Pump Inboard Vertical	.168 In/Sec	.300 G-s
PIA - Pump Inboard Axial	.144 In/Sec	.352 G-s
 MON65 - Amide Reactor Circ Primary	(17-Aug-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.169 In/Sec	.333 G-s
MOP - Motor Outboard Horz Peakvue	.180 G-s	
MOV - Motor Outboard Vertical	.363 In/Sec	.164 G-s
MOA - Motor Outboard Axial	.121 In/Sec	.097 G-s
MIH - Motor Inboard Horizontal	.155 In/Sec	.553 G-s
MIP - Motor Inboard Horz Peakvue	.395 G-s	
MIV - Motor Inboard Vertical	.268 In/Sec	.109 G-s
MIA - Motor Inboard Axial	.123 In/Sec	.084 G-s
	OVERALL LEVEL	1K-20kHz
PIH - Pump Inboard Horizontal	.116 In/Sec	.132 G-s
PIP - Pump Inboard Horz Peakvue	.096 G-s	
PIV - Pump Inboard Vertical	.144 In/Sec	.133 G-s
PIA - Pump Inboard Axial	.082 In/Sec	.075 G-s
 MON36 - Irganox Mix/Feed Pump	(17-Aug-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.060 In/Sec	.178 G-s
MOP - Motor Outboard Horz Peakvue	.056 G-s	
MOV - Motor Outboard Vertical	.037 In/Sec	.195 G-s
MOA - Motor Outboard Axial	.038 In/Sec	.254 G-s
IIH - Input Shaft Inboard Horizontal	.048 In/Sec	
IIP - Input Shaft Inboard Horz Peakvue	.212 G-s	
IIV - Input Shaft Inboard Vertical	.039 In/Sec	
IIA - Input Shaft Inboard Axial	.038 In/Sec	
	OVERALL LEVEL	1K-20kHz
POH - Pump Outboard Horizontal	.071 In/Sec	.581 G-s
POP - Pump Outboard Horz Peakvue	.233 G-s	
POV - Pump Outboard Vertical	.079 In/Sec	.838 G-s
POA - Pump Outboard Axial	.110 In/Sec	1.312 G-s

Clarification Of Vibration Units:

Acc	-->	G-s	RMS
Vel	-->	In/Sec	PK

Abbreviated Last Measurement

Summary

Database: Lucite Memphis MMA.rbm
 Area: MMA
 Route No. 5: QRTLY
 Report Date: 03-Sep-20 10:39

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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SAR38 - Drying Tower Pumpout	(21-Aug-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.132 In/Sec	1.096 G-s

MOP - Motor Outboard Horz Peakvue	.540 G-s	
MOV - Motor Outboard Vertical	.088 In/Sec	.304 G-s
MOA - Motor Outboard Axial	.121 In/Sec	.239 G-s
MIH - Motor Inboard Horizontal	.156 In/Sec	.171 G-s
MIP - Motor Inboard Horz Peakvue	.062 G-s	
MIV - Motor Inboard Vertical	.134 In/Sec	.042 G-s
MIA - Motor Inboard Axial	.159 In/Sec	.039 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.455 In/Sec	.190 G-s
PIP - Pump Inboard Horz Peakvue	.024 G-s	
PIV - Pump Inboard Vertical	.238 In/Sec	.084 G-s
PIA - Pump Inboard Axial	.309 In/Sec	.137 G-s
SAR127 - Final Twr Pumpout Drain Pmp	(21-Aug-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.020 In/Sec	.392 G-s
MOP - Motor Outboard Horz Peakvue	.095 G-s	
MOV - Motor Outboard Vertical	.022 In/Sec	.111 G-s
MOA - Motor Outboard Axial	.025 In/Sec	.191 G-s
MIH - Motor Inboard Horizontal	.020 In/Sec	.340 G-s
MIP - Motor Inboard Horz Peakvue	.136 G-s	
MIV - Motor Inboard Vertical	.031 In/Sec	.107 G-s
MIA - Motor Inboard Axial	.031 In/Sec	.129 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.061 In/Sec	.083 G-s
PIP - Pump Inboard Horz Peakvue	.035 G-s	
PIV - Pump Inboard Vertical	.035 In/Sec	.132 G-s
PIA - Pump Inboard Axial	.075 In/Sec	.101 G-s
SAR222 - Oleum Twr Drain Pmp	(21-Aug-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.071 In/Sec	.494 G-s
MOP - Motor Outboard Horz Peakvue	.0064 G-s	
MOV - Motor Outboard Vertical	.098 In/Sec	.378 G-s
MOA - Motor Outboard Axial	.088 In/Sec	.496 G-s
MIH - Motor Inboard Horizontal	.059 In/Sec	.526 G-s
MIP - Motor Inboard Horz Peakvue	.013 G-s	
MIV - Motor Inboard Vertical	.065 In/Sec	.341 G-s
MIA - Motor Inboard Axial	.078 In/Sec	.428 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.216 In/Sec	3.263 G-s
PIP - Pump Inboard Horz Peakvue	.021 G-s	
PIV - Pump Inboard Vertical	.182 In/Sec	2.081 G-s
POA - Pump Outboard Axial	.265 In/Sec	2.767 G-s
SAR233 - InterpassTwr Drain Pmp1	(21-Aug-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.074 In/Sec	.101 G-s
MOP - Motor Outboard Horz Peakvue	.0016 G-s	
MOV - Motor Outboard Vertical	.089 In/Sec	.054 G-s
MOA - Motor Outboard Axial	.032 In/Sec	.106 G-s
MIH - Motor Inboard Horizontal	.070 In/Sec	.080 G-s
MIP - Motor Inboard Horz Peakvue	.0029 G-s	
MIV - Motor Inboard Vertical	.066 In/Sec	.042 G-s
MIA - Motor Inboard Axial	.039 In/Sec	.136 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
	.026 In/Sec	.027 G-s

PIP - Pump Inboard Horz Peakvue	.0016 G-s	
PIV - Pump Inboard Vertical	.030 In/Sec	.055 G-s
PIA - Pump Inboard Axial	.032 In/Sec	.031 G-s

Clarification Of Vibration Units:

Acc	-->	G-s	RMS
Vel	-->	In/Sec	PK